

REMARKS

I. REJECTIONS UNDER 35 U.S.C. §112, ¶2

The Examiner rejected claims 18, 19, 27, 28 and 30 as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. In particular, the Examiner indicated the term “high precision” is not defined. Claims 18, 19, 27, 28 and 30 have now been amended to delete the term “high precision.” Thus, the Examiner should withdraw this §112, ¶2 rejection.

II. PRIOR ART REJECTIONS

The Claimed Invention

The independent claims now pending in the application as amended are claims 1, 40, 46, 49, 51, 52, 53, 54 and 56. All of these independent claims are directed to a process for coating a three-dimensional substrate with a uniform, thin layer of 100 percent solids material. The claims vary in certain respects. For example, claim 1 recites providing a “uniform thin film layer of coating of said coating material on said three-dimensional substrate.” Claim 4 as amended recites, among other steps, a process for providing “a uniform thin film coating of said coating material on said three-dimensional substrate”. Claim 46 recites another step in a process for coating a three-dimensional substrate, “wherein said wet build of coating material and said dry build of coating material are substantially equal and each 0.001 inches or less thick.”

All of these independent claims recite a process for coating a three-dimensional substrate. An example of a three-dimensional substrate is illustrated in Figure 1 of the application. Three-dimensional substrates includes items that have edges, grooves, corners or other contoured or recessed areas in their surfaces that are difficult to coat. For example, the three-dimensional substrate illustrated in Figure 1 is a cabinet door with various contours, recessed areas and corners in its surface. Three-dimensional substrates do not include flat, two dimensional substrates such as flat paneling for walls, plywood sheets and wood flooring. A two-dimensional substrate is characterized in that it is a substantially flat surface. Accordingly, the Applicants respectfully disagree with the Examiner’s statement in the Office Action that all substrates are inherently three-dimensional.

Prior to the invention, there has been no way to apply a thin, uniform coat of 100 percent solids coating to a three-dimensional substrate. A “thin film” is .2 mils to 2 mils in thickness. Prior processes for coating three-dimensional substrates in which a thin film of 100% solids material was applied resulted in blotchy, dry and uneven coatings and the coatings failed to enter areas not perpendicular to the point of dispensation of the coating. Accordingly, prior to the invention, a process for coating a three-dimensional substrate with a 100 percent solids coating applied uniformly in a thin film layer as recited in independent claims 1, 40, 46, 49, 51, 52, 53, 54 and 56 has not been achieved by conventional processes and techniques.

Rejections in View of Blazey ‘931

Claims 1-5, 7,12-17, 46, 47 and 51-56 stand rejected in view of Blazey ‘931 under 35 U.S.C. §102(b). Blazey ‘931 relates to applying a coating of 100 percent solids material to a substrate. However, in contrast to the invention, Blazey ‘931 only discloses applying a coating to two-dimensional substrates such as paneling for truck-trailer doors having a flat surface. Blazey ‘931, Col. 2, lines 13-14; Col. 5, lines 33-48. Blazey ‘931 does not disclose applying a 100 percent solids coating to products comprised of three-dimensional substrates. Accordingly, Blazey ‘931 plainly does not anticipate claims 1-5, 7, 12-17, 46, 47, and 51-56 which all require a process for coating a three-dimensional substrate. For this reason, the Applicants respectfully request that the Examiner withdraw this rejection as to these claims in view of Blazey ‘931.

Rejections in View of Schlegel ‘022

Claims 1, 4, 5, 6, 53 and 56 stand rejected in view of Schlegel ‘022. Schlegel ‘022 relates to applying a powder coating to a substrate. However, Schlegel plainly discloses to apply such powder coatings in substantially thick layers. Indeed, Schlegel ‘022 states that, “Powder coatings are relatively thick, i.e., typically being between about 3 and about 10 mils thick (75 to 250 microns) at edges and corners . . . (Schlegel ‘022, Col. 4, lines 3-16). Further, this passage of Schlegel ‘022 emphasizes the differences in coatings at the edges and corners of the substrate, which is a non-uniform coating. In contrast, claims 1, 4, 5, 6, 53 and 56 all recite thin film uniform coating thicknesses of between .2 and 2 mils -- or 1 mil or less. Accordingly, Schlegel ‘022 does not anticipate claims 1, 4, 5, 6, 53 and 56 and the Applicants respectfully request the Examiner to withdraw this rejection as to these claims.

Rejections in View of Nielsen '638

Claims 1-5, 7-13, 18, 20-22, 28, 32-35, 39-44, 46, 47, 49, and 51-56 all stand rejected under 35 U.S.C. §102(b) or 35 U.S.C. §103(a) in view of Nielsen '638. Nielsen '638 is directed to an unusual process of spraying a substrate in two different atmospheres comprising different levels of soluble gases to try to eliminate gas bubbles in the coating being applied. However, as the Examiner indicates in the Office Action, Nielsen '638 does not disclose applying these coatings to a three-dimensional substrate. Instead, the Examiner cites to Col. 16, lines 57-63 of Nielson '638 and states that all substrates are "inherently" three-dimensional. As set forth above, this statement is respectfully not correct. Moreover, the passage of Nielsen '638 relied upon for this proposition merely indicates that the Nielson '638 process may be used on substrates of various compositions such as metal, wood, glass, plastic, etc. (Col. 16, lines 57-63). Nielson '638 does not even indicate that its process is workable on a three-dimensional substrate. Indeed, in the examples provided in Nielson '638, the substrates are not described as three-dimensional. See Col. 22, lines 7-11. Because Nielsen '638 fails to disclose a three-dimensional substrate, the rejections of claims 1-5, 7-13, 18, 22-22, 28, 32-35, 39-44, 46, 47, 49, and 51-56 are not well taken and should be withdrawn.

Rejections in View of Hasenour '535

Claims 1, 4-7, 12, 13, 32-35, 52, 53 and 56 stand rejected under 35 U.S.C. §102(e) in view of Hasenour '535. However, Hasenour '535 nowhere discloses applying a coating that is a uniform thin film. Hasenour '535 simply **does not** disclose anywhere a thin film coating, which is defined to be between .2 mils and 2 mils.

In contrast, all of claims 1, 4-7, 12, 13, 32-35, 52, 53 and 56 either all recite applying a uniform thin film coating -- meaning a coating in the range of between .2 and 2 mils -- or a coating of one mil or less. Accordingly, these claims plainly distinguish over Hasenour '535. Accordingly, the Applicants respectfully request that these rejections be withdrawn.

Obviousness Rejections In View of Blazey '531 and Nielsen '638

The Applicants respectfully submit that the obviousness rejections of certain dependent claims are not well taken for the reasons set forth above. Thus, the Applicants respectfully request that these rejections be withdrawn.

The Applicants submit that all pending claims are now allowable.

Respectively submitted,


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